

METHODS OF SAMPLING AND TESTING
MT 510-04
FIELD NUMBERING CONCRETE CYLINDERS
(Montana Method)

1 Scope:

- 1.1 The procedure outlined in this method has been adopted in order to establish a uniform, statewide numbering system for concrete test specimens.

2 Procedure:

- 2.1 Each class of concrete for the entire project shall have its own set of consecutive specimen numbers, starting with number "1" and continuing to the completion of the project. If the supplier of concrete is changed, a new set of consecutive specimen numbers will have to be used, representing the new source of supply.
- 2.1.1 The consecutive numbers will constitute the first part of the complete specimen number.
- 2.1.2 The next part of the specimen number will be the letters which designate the class of concrete being represented by the test specimen, i.e., 1A, 1AA, 1DD, 1DDA, etc.
- 2.1.3 The third part of the specimen number will be the stationing of the structure on which the pour was made.
- 2.1.4 The letter appearing last in the specimen number will designate the lane in which the structure is being built, when applicable.

3 Example:

- 3.1 An example of the numbering system might be "1AD1325E," meaning the first Class "AD" concrete cylinder made for the eastbound structure at Station 1325+10.35. The first and second part of the specimen number, as defined by paragraphs 2.1.1 and 2.1.2 will be consecutive throughout the project but the third and fourth part of the number, as defined by paragraphs 2.1.3 and 2.1.4, will change to identify the structure or structures involved.

4 Running Average of Strength:

- 4.1 The Materials Bureau will continue to keep a running average of the strength of each class of concrete on the project. The average will be for the entire project and not for individual structures. These averages will be reported to the Construction Bureau and the Division in which the project is located.

5 Split Loads:

- 5.1 On multiple structure jobs where one load of concrete is split and placed on more than one structure on the project, one set of test specimens will suffice, providing the split load of concrete is not altered in any way such as delaying successive pours, introducing additional water into the mix, etc.

6 Marking Sides of Cylinder:

- 6.1 All identifying markings on concrete cylinders shall be placed on the sides of the cylinder instead of, or in addition to, markings being placed on the ends. In addition to the specimen numbers described in paragraph 2 and 3, it is important to place the Project Number on the side of the cylinder. Several sets of cylinders may be received in the Materials Bureau at the same time bearing identical specimen numbers but representing different projects which prevents the specimens from being positively identified.

6 Marking Sides of Cylinder:

- 6.2** Concrete cylinders, upon arriving at the Materials Bureau, are immediately capped on both ends with a sulphur compound before being placed in the moist room to await the proper breaking date. If the field personnel place their identifying numbers on the end of the cylinders only, it is necessary for the Materials Bureau to transfer the identifying numbers to the side of the cylinder before it is capped, as the original information will be covered by the caps. Each time it is necessary to transfer identifying markings, the chances for errors increase.